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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,176	01/16/2002	Daniel Thomas Wetzel	RCA 89700	4983

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EXAMINER

LEE, JOHN J

ART UNIT PAPER NUMBER

2618

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/031,176	Applicant(s) WETZEL, DANIEL THOMAS	
	Examiner JOHN J. LEE	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8 and 10 is/are rejected.
- 7) ☒ Claim(s) 2,9, and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 1, 3-8, and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodeffer (US Patent number 5,507,025) in view of Ben-Efraim et al. (US Patent number 5,844,948).

Regarding **claim 1**, Rodeffer discloses that a method for acquiring satellite signals using multiple low noise blocks (LNBs) (Fig. 17 and column 12, lines 56 – column 13, lines 28). Rodeffer teaches that receiving a request to switch from a first LNB (Ku band LNB (1702) in Fig. 17) to a second LNB (C band LNB (1701) IN Fig. 17) (Fig. 17 and column 12, lines 40 – column 13, lines 28, where teaches receives a signal (signal for request to switch to the LNB band) from a different band for downconversion the satellite broadcast signal). Rodeffer teaches that switching (1703 in Fig. 17) from the first LNB (Ku band LNB (1702) in Fig. 17) to the second LNB (C band LNB (1701) IN Fig. 17) (Fig. 17 and column 12, lines 56 – column 13, lines 28, where teaches the switch selects a LNB to switch to the LNB as a second LNB when a request signal receives). Rodeffer teaches that recalling from memory (1603 in Fig. 16) a frequency offset value associated with said second LNB (column 11, lines 25 – column 12, lines 54 and Fig. 15, 17, where teaches the second stage in LNB removes a second skirt of the selected channel and

compensates for offset created by the first stage (memory has a frequency offset value and recall frequency offset value of the first stage) means does not have to track the offset of the second stage). Rodeffer teaches that tuning a tuner frequency to a value using the frequency offset value (column 11, lines 25 – column 12, lines 54 and Fig. 15, 17, where teaches the second mixer does not compensate for the offset created by first mixer, but instead is precision tuned by the user to maximize predetection bandwidth to minimize video truncation). Rodeffer teaches that frequency locking said tuner to a signal from said second LNB (column 8, lines 45 – column 9, lines 16 and Fig. 5, 7, where teaches a local oscillator (tuner) is a phase locked loop to lock to lock the signal from the LNB).

Rodeffer does not specifically disclose the limitation “recalling from memory a local oscillator frequency offset value and a selected channel with a tuner using the local oscillator frequency offset value”. However, Ben-Efraim teaches the limitation “recalling from memory a local oscillator frequency offset value (Fig. 4, 5 and column 6, lines 4 – column 7, lines 38, where teaches supplying the sampling oscillator frequency offset value from buffers to low noise block which are I and Q down converter (LNB)) and a selected channel with a tuner using the local oscillator frequency offset value (Fig. 4, 5 and column 6, lines 4 – column 7, lines 38, where teaches a tuner which performs direct downconverter to baseband is susceptible to significant frequency offset errors in the baseband signal, direct downconversion tuners feasible)”. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Rodeffer system as taught by Ben-Efraim, provide the motivation to enhance digital

broadcast satellite signal adaptability technique for producing high performance signal in satellite communication system.

Regarding **claim 3**, Rodeffer and Ben-Efraim disclose all the limitation, as discussed in claim 1. Furthermore, Rodeffer discloses that the frequency offset value compensates for frequency drift in the second LNB (column 11, lines 25 – column 12, lines 54, Fig. 15, 17, and column 5, lines 9 – 51).

Regarding **claim 4**, Rodeffer and Ben-Efraim disclose all the limitation, as discussed in claim 1. Furthermore, Rodeffer discloses that the frequency offset compensates for a frequency adjustment in a satellite transponder (column 5, lines 9 – 51, Fig. 1, 4, and column 9, lines 27 – 58, where teaches a frequency has been adjusted in satellite receiver for reducing the frequency offset).

Regarding **claim 5**, Rodeffer and Ben-Efraim disclose all the limitation, as discussed in claim 1. Furthermore, Rodeffer discloses that the frequency offset compensates for a frequency adjustment in a satellite transponder and frequency drift in the second LNB (column 5, lines 9 – 51, Fig. 1, 4, and column 9, lines 27 – 58, where teaches a frequency has been adjusted second low noise block through mixer by providing the oscillator in satellite receiver for reducing the frequency offset).

Regarding **claim 6**, Rodeffer and Ben-Efraim disclose all the limitation, as discussed in claim 1. Furthermore, Rodeffer discloses that activating the second LNB while tuning said tuner frequency (column 12, lines 40 – column 13, lines 13 and Fig. 17).

Regarding **claim 7**, Rodeffer and Ben-Efraim disclose all the limitation, as discussed in claim 1. Furthermore, Rodeffer discloses that the frequency offset for second LNB is derived from a frequency drift of the first LNB (column 12, lines 40 – column 13, lines 13, Fig. 17, and column 11, lines 25 – 64).

Regarding **claim 8**, Rodeffer and Ben-Efraim disclose all the limitation, as discussed in claim 1. Furthermore, Rodeffer discloses that a tuner (local oscillator) coupled to said first and second LNBs (Fig. 17 and column 12, lines 40 – column 13, lines 13). Rodeffer further discloses teaches that a memory (1603 in Fig. 16) coupled to said tuner (404, 408 in Fig. 17), for storing a first frequency offset value for said first LNB and a second frequency offset value for said second LNB (Fig. 16, 17, column 12, lines 40 – column 13, lines 13, and column 11, lines 25 – 64).

Regarding **claim 10**, Rodeffer and Ben-Efraim disclose all the limitation, as discussed in claim 1. Furthermore, Rodeffer discloses that the first and second frequency offset values represent the respective frequency drift of the first and second LNBs (Fig. 16, 17, column 12, lines 40 – column 13, lines 13, and column 11, lines 25 – 64).

Allowable Subject Matter

3. Claims 2, 9, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose the limitation “the tuner frequency value comprises a second LNB base frequency plus the frequency offset value, and the tuner

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comprises a local oscillator having a frequency substantially equal to a base frequency plus either the first or second frequency offset value" as specified in the claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barakat et al. (US 5,898,455) discloses Interface Modules and Methods for Coupling Combined Communication Signals to Communication Receivers.

Eastman (US 5,940,737) discloses Signal Selector.

Information regarding...Patent Application Information Retrieval (PAIR) system... at 866-217-9197 (toll-free)."

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231
Or P.O. Box 1450
Alexandria VA 22313

or faxed (571) 273-8300, (for formal communications intended for entry)

Or: (703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to USPTO Headquarters, Alexandria, VA.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**.

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He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Edward Urban**, can be reached on (571) 272-7899. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L
May 26, 2006

John J Lee



EDWARD F. URBAN
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